06- DEPARTMENT OF ENVIRONMENTAL PROTECTION

096 BUREAU OF AIR QUALITY CONTROL

CHAPTER 137: EMISSION STATEMENTS

SUMMARY: This regulation establishes requirements for the annual reporting of pollutant emissions from stationary sources of air pollution.

1. Applicability

A. This regulation shall be effective in all ambient air quality control regions in the State of Maine.

B. This regulation applies to all stationary sources which emit, or have the potential to emit into the ambient air, the following air pollutants at or above the minimum required reporting level:

1. Carbon monoxide	100 tpy
2. Sulfur dioxide	40 tpy
3. Volatile organic compounds (VC	OC) 25 tpy
4. Nitrogen oxides (NOx)	25 tpy
5. Fine Particulate Matter (PM10)	15 tpy
6. Lead	0.1 tpy

C. This regulation applies to all stationary sources which use, process, or manufacture 2000 pounds per year or more, either alone or in aggregate, of any compound listed in Appendix A. If any of the following compounds are used at or above the specified threshold below, they must be reported under this regulation.

1.	Chromium and chromium compounds	10 lb/yr
2.	Dioxin	10 lb/yr
3.	Acetaldehyde	200 lb/yr
4.	Arsenic and arsenic compounds	200 lb/yr

5. Asbestos6. Benzene	200 lb/yr 200 lb/yr
7. Bis(2-ethylhexyl) phthalate	200 lb/yr
8. Cadmium and cadmium compounds	200 lb/yr
9. Chloroform	200 lb/yr
10. Dimethyl sulfate	200 lb/yr
11. 1,4-Dioxane	200 lb/yr
12. Epichlorohydrin	200 lb/yr
13. Formaldehyde	200 lb/yr
14. 4,4-Methylene bis(2-chloroanline)	200 lb/yr
15. Methylene chloride	200 lb/yr
16. Nickel and nickel compounds	200 lb/yr
17. Perchloroethylene	200 lb/yr
18. Propylene oxide	200 lb/yr
19. Trichhloroethylene	200 lb/yr

D. If any one pollutant as specified in Section 1(B) is emitted at or above the minimum required reporting level, all the other pollutant data in Section 1(B) must be collected and reported.

2. <u>Definitions</u>

A. AIRS/AFS. "AIRS/AFS" means the reference to the United States Environmental Protection Agency computerized database system called: Aerometric Information Retrieval System/ AIRS Facility Subsystem.

B. Capture efficiency. "Capture efficiency" means the weight per unit time of VOC entering a capture system and delivered to a control device divided by the total weight per unit time of VOC generated by a source of VOC, expressed as a percentage.

- C. Control efficiency. "Control efficiency" means the actual total control efficiency achieved by the control device(s).
- D. Control equipment identification code. "Control equipment identification code" means the specific AIRS/AFS code which defines the equipment (such as a catalytic afterburner or carbon adsorber) used to reduce, by destruction or removal, the amount of air pollutant(s) in an air stream prior to discharge to the ambient air.
- E. Emission factor. "Emission factor" means an estimate of the rate at which a pollutant is released to the atmosphere as the result of some activity, divided by the rate of that activity (e.g. production rate or throughput).
- F. Estimated emissions method code. "Estimated emissions method code" means a one-position AIRS/AFS code which identifies the estimation technique used in the calculation of estimated emissions.
- G. Peak ozone season. "Peak ozone season" means that continuous 3 month period from June 1 through August 31 during which the highest ozone exceedance days typically occur.
- H. Plant. "Plant" means the total facilities available for production or service. Plant level information (e.g., address, latitude/longitude, SIC code) is a required component of emission statement reporting.
- I. Point. "Point" means a physical emission point (such as a boiler) or process (such as papercoating) within a plant that results in pollutant emissions. A unique identifier (point identification number) exists for each point within each facility in the AIRS database.
- J. Process rate. "Process rate" means quantity per unit time of any raw material or process intermediate consumed, or product generated through the use of any equipment, source operation, or process. For a stationary internal combustion unit or any other fuel burning equipment, this term means the quantity of fuel burned per unit time. For a waste treatment unit, this term means the quantity of solid waste treated per unit time.
- K. Segment. "Segment" means components of an emissions point or process, at the level that emissions are calculated. One example of a segment is a boiler burning #2 fuel oil. A unique identifier (segment identification number) exists for each segment within each point and plant in the AIRS database. Each segment is also identified by a SCC. Separate segment identifiers and corresponding SCCs would be required for each fuel type used in a multifueled boiler for example.
- L. SCC code. "SCC code" means Source Classification Code.
- M. SIC code. "SIC code" means Standard Industrial Classification code devised by the

Office of Management and Budget (OMB) to classify establishments according to the type of economic activity in which they are engaged.

N. Typical ozone season day. "Typical ozone season day" means a day typical of that period of the year during the peak ozone season.

3. Requirements

The owner or operator of any facility meeting the applicability requirements in Section 1 must submit an emission statement to the Department on an annual basis. The emission statement must be submitted no later than July 1, for the previous calendar year, beginning no later than July 1, 1994 for the calendar year 1993. Each source will have the option of submitting data in the specified format on magnetic media.

4. <u>Emission Statement</u>

The emission statements shall contain, at a minimum, the following information on a form prescribed by the Department:

A. Certification that the information contained in the statement is accurate and complete to the best knowledge of the individual certifying the statement. The certification shall include the full name, title, signature, date of signature, and telephone number of the responsible official.

B. Source identification information:

- 1. Full name, physical location, and mailing address of the facility,
- 2. Latitude and longitude or UTM coordinates,
- 3. SIC code(s),
- 4. # of employees,
- 5. Dun & Bradstreet #, and
- 6. Maine Air License #, if applicable.

C. Operating information:

1. Actual fuel use or industrial process rate data monthly and annually,

- 2. Days per week on the normal operating schedule,
- 3. Hours per day during the normal operating schedule, and
- 4. Weeks per year during the normal operating schedule.

D. Point data:

- 1. Plume height or emission release height, if no well defined stack exists,
- 2. Stack height and diameter,
- 3. Exhaust temperature,
- 4. Flow rate,
- 5. Design capacity,
- 6. Exit velocity,
- 7. Boiler output used for heat (expressed as %), and
- 8. Distance to fence line (shortest).

E. Fuel parameters:

- 1. Sulfur content (%),
- 2. Ash content (%),
- 3. Heat content (BTU/unit),
- 4. Fuel consumption (thousands of gallons of fuel oil; tons of coal or wood, etc) monthly and annually,
- 5. Type of combustion units used, and
- 6. Fuel type.

F. Process parameters:

1. Type of process unit (printing press, coating line, bulk storage tank, lime kiln, incinerator, etc.),

- 2. Design rate of unit, and
- 3. Processed, produced, or stored amount (i.e. tons of solvent, material, waste, ink; air dried tons, thousands of gallons stored/throughput) monthly and annually.

G. Control equipment information:

- 1. Current primary and secondary AIRS/AFS control equipment and corresponding AIRS/AFS control equipment identification codes,
- 2. Current control equipment efficiency (expressed as %). The actual efficiency should reflect the total control efficiency from all control equipment and include downtime and maintenance degradation. If the actual control efficiency is unavailable, the design efficiency or the control efficiency limit imposed by a permit should be used, and
- 3. Capture efficiency (expressed as %). This is a measure of the volume of pollutant captured or recovered relative to the volume of pollutant generated.

H. Emissions information:

- 1. For the pollutants specified in Section 1(B),
 - a. Estimated emissions calculated by the facility or the Department based on actual process rate at the segment level, in tons per year for an annual emission rate and pounds per day for a typical ozone season day. Actual emission estimates must include upsets, downtime and fugitive emissions, and must follow an "emission estimation method" that is approved by the Department,
 - b. AFS estimated emissions method code,
 - c. Calendar year for the emissions,
 - d. Emission Factor (if emissions were calculated using an emission factor),
 - e. Stack test data if indicative of normal operating conditions, and
 - f. Material balance data if used to estimate emissions.
- 2. For the chemicals listed in Appendix A.
 - a. For each chemical used, processed, or manufactured, estimated actual

emissions to air, land and water of that chemical, at the plant level, in pounds per year,

- b. Transfer of the chemical to off-site locations in pounds per year,
- c. Any methods used for hazardous air pollutant emissions estimation must be approved by DEP, and
- d. If stack test and/or material balance data are used to estimate hazardous air pollutant emissions, these data must be supplied to DEP.

BASIS STATEMENT: In Maine, nine counties are classified as nonattainment for the federal ozone air quality standard. This regulation requires volatile organic compounds (VOC) and nitrogen oxides (NOx) data which is required by the U.S. Environmental Protection Agency for those States that have nonattainment areas for ozone. Reporting of other criteria pollutant data, i.e. carbon monoxide, sulfur dioxide, fine particulate matter, and lead is also required under this rule. In addition, this rule requires the reporting of 189 hazardous air pollutants identified by the Clean Air Act Amendments and other compounds known to be emitted in Maine that are of concern to human health.

In addition to the Basis Statement above, the Department has filed with the Secretary of State responses to comments received during the comment period.

AUTHORITY: 38 M.R.S.A., Section 585-A, 585-C

EFFECTIVE DATE: December 12, 1993

APPENDIX A CHAPTER 137 EMISSION STATEMENTS

THRESHOLD FOR REPORTING IS 2000 POUNDS UNLESS LESSER AMOUNT IS SPECIFIED

CASNUM	POLLUTANT	lbs
0075070	ACETALDEHYDE	200
0060355	ACETAMIDE	
0108247	ACETIC ANHYDRIDE	
0067641	ACETONE	
0075058	ACETONITRILE	
0098862	ACETOPHENONE	
0053963	2-ACETYLAMINOFLUORENE	
0107028	ACROLEIN	
0079061	ACRYLAMIDE	
0079107	ACRYLIC ACID	
0107131	ACRYLONITRILE	
0107051	ALLYL CHLORIDE	
ALUMCOMP	ALUMINUM & ALUMINUM COMPOUNDS	
0092671	4-AMINOBIPHENYL	
7664417	AMMONIA	
0062533	ANILINE	
0090040	O-ANISIDINE	
ANTICOMP	ANTIMONY & ANTIMONY COMPOUNDS	
ARSECOMP	ARSENIC COMPOUNDS (ALSO INORGANIC ARSINE)	200
1332214	ASBESTOS	200
BARICOMP	BARIUM & BARIUM COMPOUNDS	
0071432	BENZENE	200
0092875	BENZIDINE	
0098077	BENZOTRICHLORIDE	
0262384	BENZO[a]PYRENE	
0100447	BENZYL CHLORIDE	
BERYCOMP	BERYLLIUM & BERYLLIUM COMPOUNDS	
0092524	BIPHENYL	
0117817	BIS(2-ETHYLHEXYL) PHTHALATE	200
0075252	BROMOFORM	
0106990	1,3-BUTADIENE	
0071363	N-BUTANOL	
0123864	N-BUTYL ACETATE	
CADMCOMP	CADMIUM & CADMIUM COMPOUNDS	200
0156627	CALCIUM	
0105602	CAPROLACTAM	

0133062 CAPTAN

CASNUM	POLLUTANT	lbs
0063252	CARBARYL	
0075150	CARBON DISULFIDE	
0056235	CARBON TETRACHLORIDE	
0463581	CARBONYL SULFIDE	
0120809	CATECHOL	
0133904	CHLORAMBEN	
0057749	CHLORDANE	
7782505	CHLORINE	
10049044	CHLORINE DIOXIDE	
0079118	CHLORO ACETIC ACID	
0532274	2-CHLOROACETOPHENONE	
0108907	CHLOROBENZENE	
0510156	CHLOROBENZILATE	
0067663	CHLOROFORM	200
0107302	CHLOROMETHYL METHYL ETHER	
0126998	CHLOROPRENE	
CHROCOMP	CHROMIUM & CHROMIUM COMPOUNDS	10
COBACOMP	COBALT & COBALT	
COKOVEEM	COKE OVEN EMISSIONS	
BERYCOMP	COPPER & COPPER COMPOUNDS	
0095487	O-CRESOL	
0108394	M-CRESOL	
0106445	P-CRESOL	
1319773	CRESOLS/CRESYLIC ACID	
0098828	CUMENE	
CYANCOM	CYANIDE COMPOUNDS	
0094757	2,4-D, SALTS AND ESTERS	
3547044	DDE	
0334883	DIAZOMETHANE	
0132649	DIBENZOFURAN	
0096128	1,2-DIBROMO-3-CHLOROPROPANE	
0084742	DIBUTYLPHTHALATE	
0106467	1,4-DICHLOROBENZENE	
0095501	1,2-DICHLOROBENZENE	
0091941	3,3-DICHLOROBENZIDINE	
0111444	DICHLOROETHYL ETHER	
0542756	1,3-DICHLOROPROPENE	
0062737	DICHLOROVOS	
0111422	DIETHANOLAMINE	
0121697	N, N-DIETHYL ANILINE	

0064675	DIETHYL SULFATE	
0119904	3,3-DIMETHOXYBENZIDINE	
0117701	3,5 BINETHORIBENZIBENE	
CASNUM	POLLUTANT	lbs
0060117	DIMETHYL AMINOAZOBENZENE	
0119937	3,3'-DIMETHYL BENZIDINE	
0079447	DIMETHYL CARBOMOYL CHLORIDE	
0068122	DIMETHYL FORMAMIDE	
0057147	1,1-DIMETHYL HYDRAZINE	
0131113	DIMETHYL PHTHALATE	
0077781	DIMETHYL SULFATE	200
0534521	4,6-DINITRO-O-CRESOL	
0051285	2,4-DINITROPHENOL	
0121142	2,4-DINITROTOLUENE	
0123911	1,4-DIOXANE	200
0122667	1,2-DIPHENYLHYDRAZINE	
0106898	EPICHLOROHYDRIN	200
0106887	1,2-EPOXYBUTANE	
0141435	ETHANOLAMINE	
0110805	2-ETHOXYETHANOL	
0141786	ETHYL ACETATE	
0140885	ETHYL ACRYLATE	
0100414	ETHYL BENZENE	
0051796	ETHYL CARBAMATE (URETHANE)	
0075003	ETHYL CHLORIDE (CHLOROETHANE)	
0106934	ETHYLENE DIBROMIDE (DIBROMOMETHANE)	
0107062	ETHYLENE DICHLORIDE (1,2-DICHLOROETHANE)	
0107211	ETHYLENE GLYCOL	
0151564	ETHYLENE IMINE (AZIRIDINE)	
0075218	ETHYLENE OXIDE	
0096457	ETHYLENE THIOUREA	
0075343	ETHYLIDINE DICHLORIDE	
FINMINFI	FINE MINERAL FIBERS	
0050000	FORMALDEHYDE	200
0064186	FORMIC ACID	
0076131	FREON 113 (TRICHLOROTRIFLUROETHANE)	
0098011	FURFURAL	
GLYCETHE	GLYCOL ETHERS	
0076448	HEPTACHLOR	
0118741	HEXACHLOROBENZENE	
0087683	HEXACHLOROBUTADIENE	
0077474	HEXACHLOROCYCLOPENTADIENE	
0067721	HEXACHLOROETHANE	

0680319	HEXAMETHYLPHOSPHORAMIDE	
0110543	HEXANE	
0302012	HYDRAZINE	
CASNUM	POLLUTANT	lbs
7647010	HYDROCHLORIC ACID	
7664393	HYDROGEN FLOURIDE (HYDROFLOURIC ACID)	
7783064	HYDROGEN SULFIDE	
0123319	HYDROQUINONE	
0078591	ISOPHORONE;	
0067630	ISOPROPYL ALCOHOL	
LEADCOMP	LEAD & LEAD COMPOUNDS	200
0058899	LINDANE	
0108316	MALEIC ANHYDRIDE	
MANGCOMP	MANGANESE & MANGANESE COMPOUNDS	
MERCCOMP	MERCURY & MERCURY COMPOUNDS	
0067561	METHANOL	
0072435	METHOXYCHLOR	
0109864	2-METHOXYETHANOL	
0096333	METHYL ACRYLATE	
0074839	METHYL BROMIDE (BROMOMETHANE)	
0074873	METHYL CHLORIDE	
0071556	METHYL CHLOROFORM (1,1,1-TRICHLOROETHANE)	
0078933	METHYL ETHYL KETONE (2-BUTANONE)	
0060344	METHYL HYDRAZINE	
0074884	METHYL IODIDE (IODOMETHANE)	
0108101	METHYL ISOBUTYL KETONE	
0624839	METHYL ISOCYANATE	
0074931	METHYL MERCAPTAN	
0080626	METHYL METHACRYLATE	
1634044	METHYL TERT BUTYL ETHER	
0101144	4,4-METHYLENE BIS(2-CHLOROANILINE)	200
0075092	METHYLENE CHLORIDE	200
	(DICHLOROMETHANE)	
0101688	METHYLENE DIPHENYL DIISOCYANATE	
0101779	4,4'-METHYLENEDIANILINE	
0091203	NAPTHALENE	
NICKCOMP	NICKEL & NICKEL COMPOUNDS	200
7697372	NITRIC ACID	
0098953	NITROBENZENE	
0092933	4-NITROBIPHENYL	
0100027	4-NITROPHENOL	

HEXAMETHYLENE-1,6-DIISOCYNATE

0079469	2-NITROPROPANE	
0684935	N-NITROSO-N-METHYLUREA	
0062759	N-NITROSODIMETHYLAMINE	
0059892	N-NITROSOMORPHOLINE	
0144627	OXALIC ACID	
0144027	OATER TEID	
CASNUM	POLLUTANT	lbs
0056382	PARATHION	
0082688	PENTACHLORONITROBENZENE (QUINTOBENZENE)	
0087865	PENTACHLOROPHENOL	
0108952	PHENOL	
0106503	P-PHENYLENDIAMINE	
0075445	PHOSGENE	
7803512	PHOSPHINE	
7723140	PHOSPHORUS	
0085449	PHTHALIC ANHYDRIDE	
1336363	POLYCHLORINATED BIPHENYLS	
POLORGMA	POLYCYCLIC ORGANIC MATTER	
1120714	1,3-PROPANE SULTONE	
0057578	BETA-PROPIOLACETONE	
0123386	PROPIONALDEHYDE	
0114261	PROPOXUR (BAYGON)	
0078875	PROPYLENE DICHLORIDE (1,2-DICHLOROPROPANE)	
0075569	PROPYLENE OXIDE	200
0075558	1,2-PROPYLENIMINE (2-METHYL AZIRIDINE)	
0091225	QUINOLINE	
0106514	QUINONE	
RADIONUC	RADIONUCLIDES (INCLUDING RADON)	
SELECOMP	SELENIUM & SELENIUM COMPOUNDS	
0100425	STYRENE	
0096093	STYRENE OXIDE	
7664939	SULFURIC ACID	
1746016	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN	10
	& CONGENERS	
0079345	1,1,2,2-TETRACHLOROETHANE	
0127184	TETRACHLOROETHYLENE (PERCHLOROETHYLE	NE) 200
0109999	TETRAHYDROFURAN	
13463677	TITANIUM DIOXIDE (TITANIUM OXIDE)	
7550450	TITANIUM TETRACHLORIDE	
0108883	TOLUENE	
0095807	2,4-TOLUENE DIAMINE	
0584849	2,4-TOLUENE DIISOCYANATE	
0095534	O-TOLUIDINE	

8001352	TOXAPHENE (CHLORINATED CAMPHENE)	
0120821	1,2,4-TRICHLOROBENZENE	
0079005	1,1,2-TRICHLOROETHANE	
0079016	TRICHLOROETHYLENE	200
0088062	2,4,6-TRICHLOROPHENOL	
0095954	2,4,5-TRICHLOROPHENOL	
0121448	TRIETHYLAMINE	

CASNUM	POLLUTANT	lbs
1582098	TRIFLURALIN	
0540841	2,2,4-TRIMETHYLPENTANE	
8006642	TURPENTINE	
0108054	VINYL ACETATE	
0593602	VINYL BROMIDE	
0075014	VINYL CHLORIDE	
0075354	VINYLIDENE CHLORIDE (1,1-DICHLOROETHYLENE)	
0106423	P-XYLENES	
0095476	O-XYLENES	
0108383	M-XYLENES	
1330207	XYLENES (ISOMERS & MIXTURE)	
ZINCCOMP	ZINC & ZINC COMPOUNDS	